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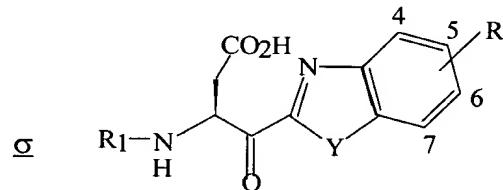
AMENDMENTS TO THE CLAIMS

Please add claims 142-251 as indicated below. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-101 (Canceled).

102. (Original) A compound represented by the formula:



wherein the ring is optionally substituted with one or more R groups, preferably 0, 1 or 2; and wherein:

R₁ is R₅-(A)_p-;

R₅ is selected from the group consisting of:

-H,

-Ar₁,

-CO-Ar₁,

-SO₂-Ar₁,

-R₉,

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-CO-R₉,

-CO-O-R₉,

-SO₂-R₉,

-CO-N^{/Ar₁}
^{\R₁₀},

-SO₂-N^{/Ar₁}
^{\R₁₀},

-CO-N^{/R₉}
^{\R₁₀}, and

-SO₂-N^{/R₉}
^{\R₁₀};

each A is independently selected from the group consisting of any α -amino acid;

p is 0, 1, 2, 3 or 4;

Y is

-O-,

-S- or

-NH; and

R is:

-H,

-O-C₁₋₆ alkyl,

-NH(C₁₋₆ alkyl),

-N(C₁₋₆ alkyl)₂,

-S-C₁₋₆ alkyl,

-C₁₋₆ alkyl, or

-Q₂;

each R₉ is a C₁₋₆ straight or branched alkyl group optionally singly or multiply substituted by -OH, -F, or =O and optionally substituted with one Ar₁ group;

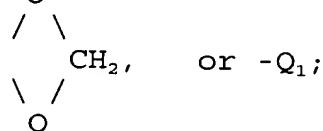
each R₁₀ is independently selected from the group consisting of -H or a C₁₋₆ straight or branched alkyl group;

each T₁ is independently selected from the group consisting of:

- CH=CH-,
- O-,
- S-,
- SO-,
- SO₂-,
- NR₁₀-,
- NR₁₀-CO-,
- CO-,
- O-CO-,
- CO-O-,
- CO-NR₁₀-,
- O-CO-NR₁₀-,
- NR₁₀-CO-O-,
- NR₁₀-CO-NR₁₀-,
- SO₂-NR₁₀-,
- NR₁₀-SO₂-, and
- NR₁₀-SO₂-NR₁₀-,

each Ar₁ is a cyclic group independently selected from the set consisting of an aryl group which contains 6, 10, 12, or 14 carbon atoms and between 1 and 3 rings, a cycloalkyl group which contains between 3 and 15 carbon atoms and between 1 and 3 rings, said cycloalkyl group being optionally benzofused, and a heterocycle group containing between 5 and 15 ring atoms

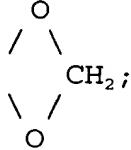
and between 1 and 3 rings, said heterocycle group containing at least one heteroatom group selected from -O-, -S-, -SO-, -SO₂-, =N-, and -NH-, said heterocycle group optionally containing one or more double bonds, said heterocycle group optionally comprising one or more aromatic rings, and said cyclic group optionally being singly or multiply substituted by -NH₂, -CO₂H, -Cl, -F, -Br, -I, -NO₂, -CN, =O, -OH, -perfluoro C₁₋₃ alkyl,



each Q₁ is independently selected from the group consisting of:

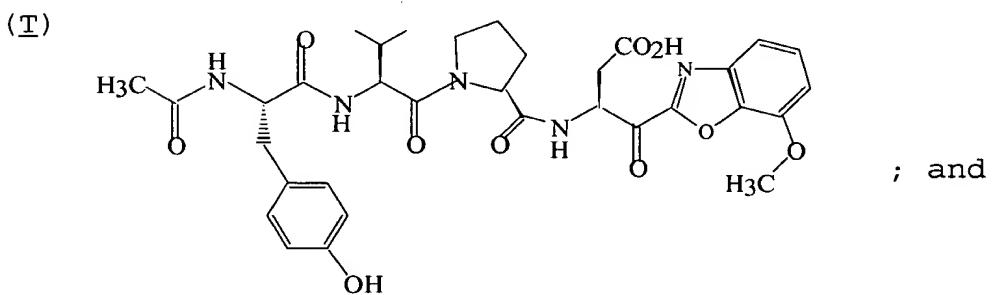
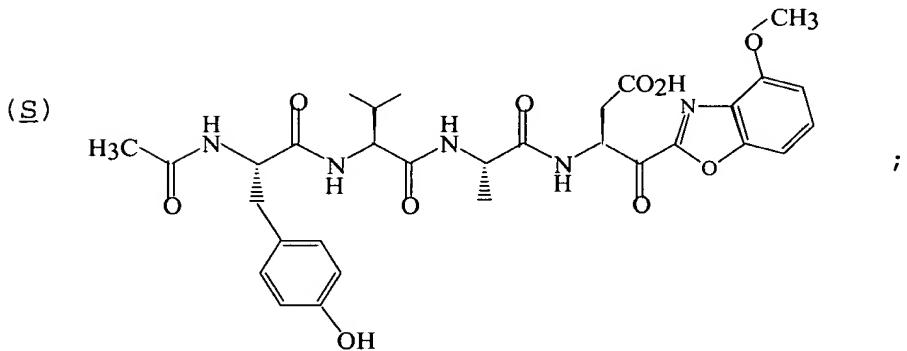
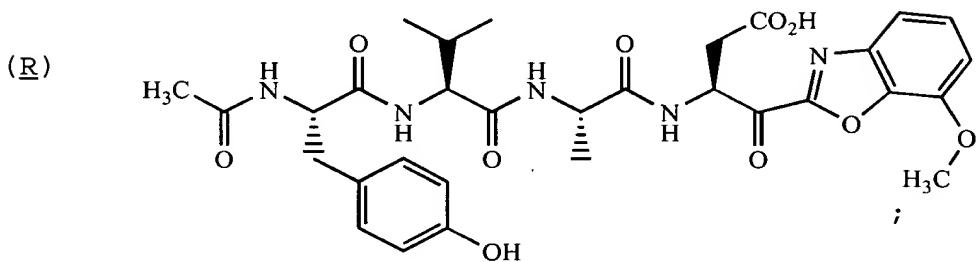
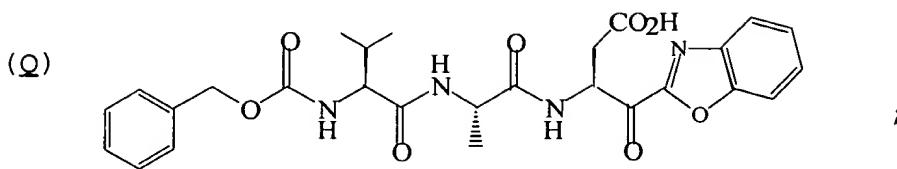
- Ar₁
- R₉,
- T₁-R₉, and
- (CH₂)_{1,2,3}-T₁-R₉;

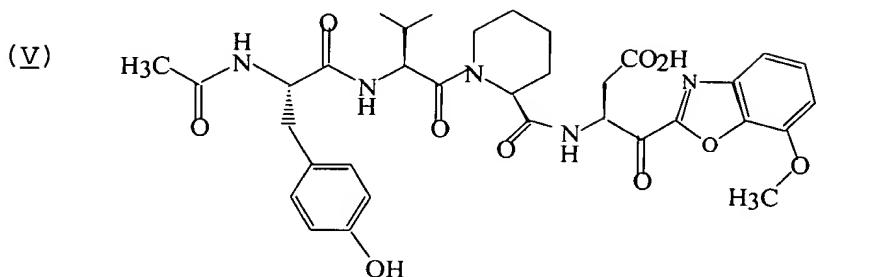
each Q₂ is independently selected from the group consisting of -OH, -NH₂, -CO₂H, -Cl, -F, -Br, -I, -NO₂, -CN, -CF₃, and



provided that when -Ar₁ is substituted with a Q₁ group which comprises one or more additional -Ar₁ groups, said additional -Ar₁ groups are not substituted with Q₁.

103. (Original) A compound according to claim 102 selected from the group consisting of:





104. (Original) A compound according to claim 102 wherein each A is independently selected from the group consisting of the α -amino acids:

alanine,
histidine,
lysine,
phenylalanine,
proline,
tyrosine,
valine,
leucine,
isoleucine,
glutamine,
methionine,
homoproline,
3-(2-thienyl) alanine, and
3-(3-thienyl) alanine.

105-124 (Canceled).

125. (Previously presented) A composition comprising a compound according to any one of claims 102-104 and a carrier.

126-128 (Canceled).

129. (Previously presented) The method for inhibiting IL-1 β secretion by LPS-stimulated human adherent mononuclear cells comprising administering to a mammal in need thereof a compound according to any one of claims 102-104 for a time and under conditions effective to inhibit interleukin-1 β converting enzyme.

130. (Previously presented) A method for inhibiting IL-1 β secretion by LPS-stimulated human peripheral blood monocytes comprising administering to a mammal in need thereof a compound according to any one of claims 102-104 for a time and under conditions effective to inhibit interleukin-1 β converting enzyme.

131. (Previously presented) A method of inhibiting interleukin-1 β converting enzyme comprising administering to a mammal in need thereof a compound according to any one of claims 102-104 for a time and under conditions effective to inhibit interleukin-1 β converting enzyme.

132. (Previously presented) The method according to claim 131, wherein the mammal is afflicted with a disease selected from the group consisting of septic shock,

septicemia, adult respiratory distress syndrome, rheumatoid arthritis, systemic lupus erythematosus, scleroderma, chronic thyroiditis, Graves' disease, autoimmune gastritis, insulin-dependent diabetes mellitus, autoimmune hemolytic anemia, autoimmune neutropenia, thrombocytopenia, chronic active hepatitis, myasthenia gravis, multiple sclerosis, amyotrophic lateral sclerosis, Alzheimer's disease, Parkinson's disease, and primary lateral sclerosis.

133. (Previously presented) The method according to claim 131, wherein the mammal is afflicted with an infectious disease.

134. (Previously presented) A method of inhibiting interleukin-1 β converting enzyme comprising administering to a mammal in need of wound healing, a compound according to any one of claims 102-104 for a time and under conditions effective to inhibit interleukin-1 β converting enzyme.

135. (Previously presented) A method for preventing or treating inflammation, comprising contacting a cell population with an inhibiting effective amount of a reagent that suppresses the protease activity of at least one member of the interleukin-1beta-converting enzyme (ICE)/CED-3 family, thereby preventing or treating inflammation, wherein said

inflammation is due to an inflammatory disease, and wherein said inflammatory disease is selected from the group consisting of arthritis, cholangitis, colitis, encephalitis, endocerolitis, hepatitis, pancreatitis, and reperfusion injury.

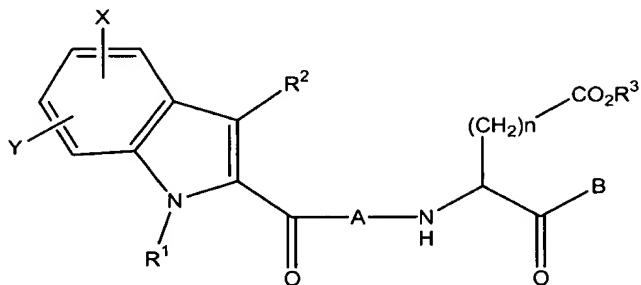
136. (Previously presented) The method of claim 135, wherein said inflammation is chronic inflammation.

137. (Previously presented) The method of claim 135, wherein said inflammation is acute inflammation.

138. (Previously presented) The method of claim 135, wherein the reagent suppresses the protease activity in an irreversible manner.

139. (Previously presented) The method of claim 135, wherein the reagent suppresses the protease activity in a reversible manner.

140. (Previously presented) The method of claim 135, wherein the reagent is a compound of formula 1:



FORMULA 1

wherein:

n is 1 or 2;

R¹ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_mCO₂R⁴, wherein m=1-4, and R⁴ is as defined below;

R² is a hydrogen atom, chloro, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_pCO₂R⁵, wherein p=0-4, and R⁵ is as defined below;

R³ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁴ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁵ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

A is a natural and unnatural amino acid;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl,

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(heteroaryl)alkyl, halomethyl, CH_2ZR^6 , $\text{CH}_2\text{OCO(aryl)}$, $\text{CH}_2\text{OCO(heteroaryl)}$; or $\text{CH}_2\text{OPO}(\text{R}_7)\text{R}_8$; where Z is an oxygen or a sulfur atom;

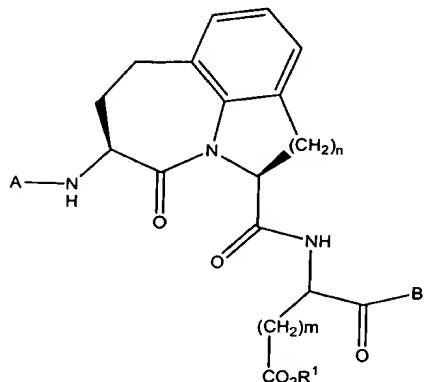
R^6 is phenyl, substituted phenyl, phenylalkyl, substituted phenylalkyl, heteroaryl, or (heteroaryl)alkyl; and

R^7 and R^8 are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl, (substituted phenyl) alkyl, and (cycloalkyl) alkyl; and

X and Y are independently selected from the group consisting of a hydrogen atom, halo, trihalomethyl, amino, protected amino, an amino salt, mono-substituted amino, di-substituted amino, carboxy, protected carboxy, a carboxylate salt, hydroxy, protected hydroxy, a salt of a hydroxy group, lower alkoxy, lower alkylthio, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, (cycloalkyl)alkyl, substituted (cycloalkyl)alkyl, phenyl, substituted phenyl, phenylalkyl, and (substituted phenyl)alkyl;

or a pharmaceutically acceptable salt thereof.

141. (Previously presented) The method of claim 135, wherein the reagent is a compound of formula 3:



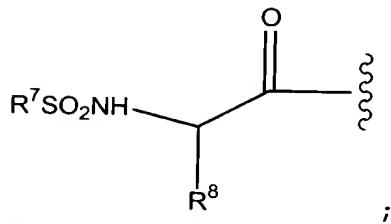
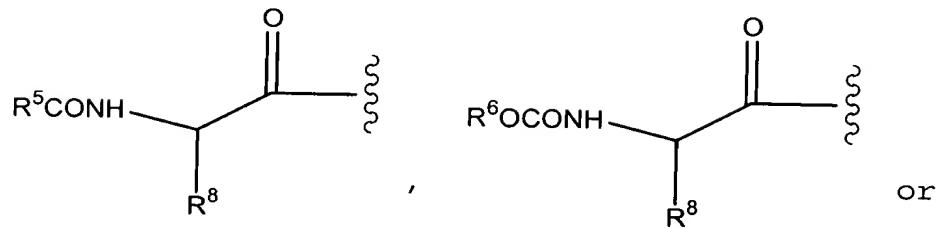
FORMULA 3

wherein:

n is 1 or 2;

m is 1 or 2;

A is R^2CO^- , R^3-O-CO^- , or $R^4SO_2^-$, a group of the formula:



further wherein:

R^1 is a hydrogen atom, alkyl or phenylalkyl;

R^2 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R^3 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R⁴ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁵ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁶ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R⁷ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁸ is an amino acid side chain chosen from the group consisting of natural and unnatural amino acids;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, (heteroaryl)alkyl, or halomethyl;

a group of the formula:

-CH₂XR⁹;

wherein R⁹ is phenyl, substituted phenyl, phenylalkyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl; and X is an oxygen or a sulfur atom;

a group of the formula:

-CH₂-O-CO-(ARYL);

a group of the formula:

-CH₂-O-CO-(HETEROARYL);

a group of the formula:

-CH₂-O-PO(R¹⁰)R¹¹ wherein R¹⁰ and R¹¹ are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl and (substituted phenyl) alkyl; and the pharmaceutically-acceptable salts thereof.

142. (New) A method for preventing or treating inflammation, comprising contacting a cell population with an inhibiting effective amount of a reagent that suppresses the protease activity of at least one member of the interleukin-1 beta-converting enzyme (ICE)/CED-3 family, thereby preventing or treating inflammation.

143. (New) The method of claim 142, wherein said inflammation is chronic inflammation.

144. (New) The method of claim 142, wherein said inflammation is acute inflammation.

145. (New) The method of claim 142, wherein said inflammation is due to an inflammatory disease.

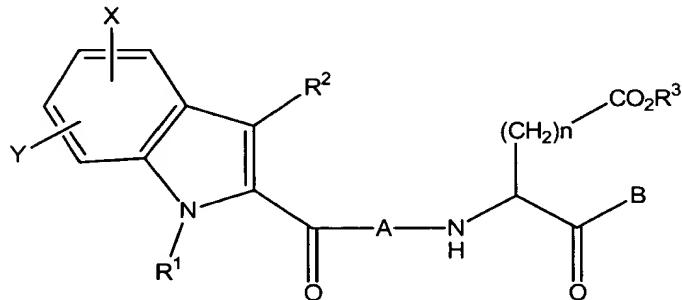
146. (New) The method of claim 145, wherein said inflammatory disease is selected from the group consisting of

septic shock, septicemia, and adult respiratory distress syndrome.

147. (New) The method of claim 142, wherein the reagent suppresses the protease activity in an irreversible manner.

148. (New) The method of claim 142, wherein the reagent suppresses the protease activity in a reversible manner.

149. (New) The method of claim 142, wherein the reagent is a compound of formula 1:



FORMULA 1

wherein:

n is 1 or 2;

R¹ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_mCO₂R⁴, wherein m=1-4, and R⁴ is as defined below;

R² is a hydrogen atom, chloro, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_pCO₂R⁵, wherein p=0-4, and R⁵ is as defined below;

R³ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁴ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁵ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

A is a natural and unnatural amino acid;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl, halomethyl, CH₂ZR⁶, CH₂OCO(aryl), CH₂OCO(heteroaryl); or CH₂OPO(R⁷)R⁸; where Z is an oxygen or a sulfur atom;

R⁶ is phenyl, substituted phenyl, phenylalkyl, substituted phenylalkyl, heteroaryl, or (heteroaryl)alkyl; and

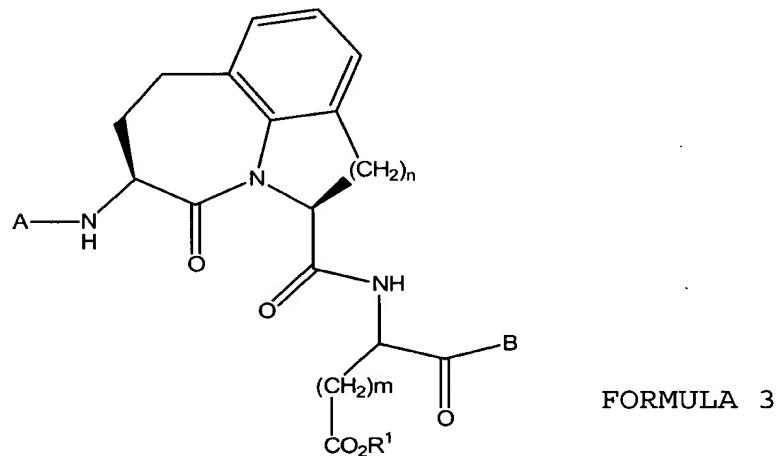
R⁷ and R⁸ are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl, (substituted phenyl)alkyl, and (cycloalkyl)alkyl; and

X and Y are independently selected from the group consisting of a hydrogen atom, halo, trihalomethyl, amino,

protected amino, an amino salt, mono-substituted amino, di-substituted amino, carboxy, protected carboxy, a carboxylate salt, hydroxy, protected hydroxy, a salt of a hydroxy group, lower alkoxy, lower alkylthio, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, (cycloalkyl)alkyl, substituted (cycloalkyl)alkyl, phenyl, substituted phenyl, phenylalkyl, and (substituted phenyl)alkyl;

or a pharmaceutically acceptable salt thereof.

150. (New) The method of claim 142, wherein the reagent is a compound of formula 3:



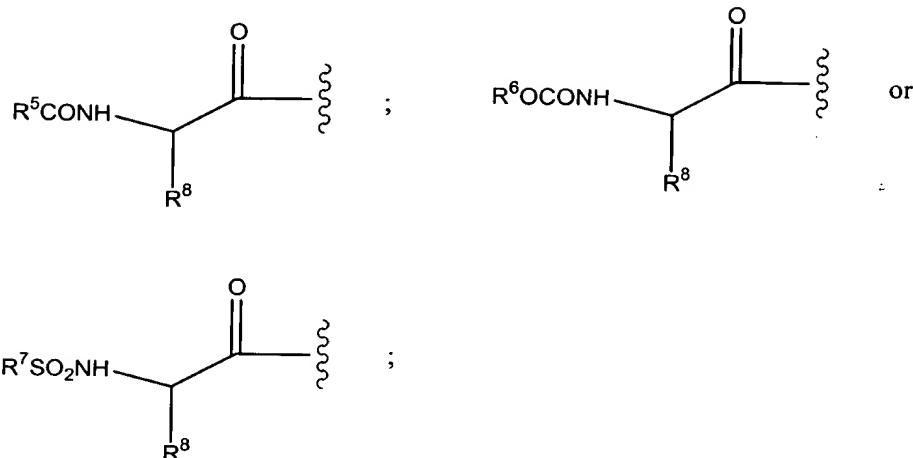
wherein:

n is 1 or 2;

m is 1 or 2;

A is R²CO-, R³-O-CO-, or R⁴SO₂-;

a group of the formula:



further wherein:

R^1 is a hydrogen atom, alkyl or phenylalkyl;

R^2 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R^3 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R^4 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R^5 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

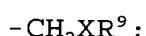
R^6 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R⁷ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁸ is an amino acid side chain chosen from the group consisting of natural and unnatural amino acids;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, (heteroaryl)alkyl, or halomethyl;

a group of the formula:

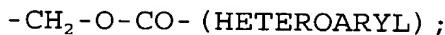


wherein R⁹ is phenyl, substituted phenyl, phenylalkyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl; and X is an oxygen or a sulfur atom;

a group of the formula:



a group of the formula:



a group of the formula:



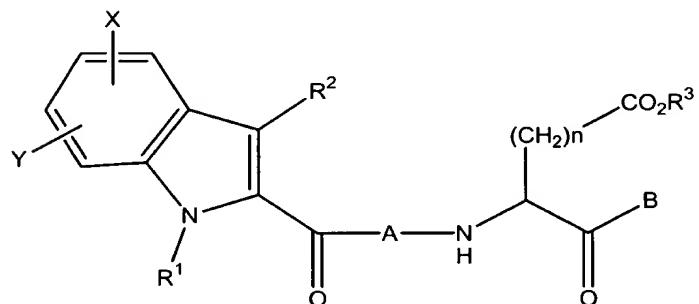
wherein R¹⁰ and R¹¹ are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl and (substituted phenyl)alkyl; and the pharmaceutically-acceptable salts thereof.

151. (New) A composition comprising a cosmetic, a reagent that suppresses the protease activity of at least one member of the interleukin-1beta-converting enzyme (ICE)/CED-3 family and a cosmetically or dermatologically acceptable carrier, adapted for preventing or ameliorating irritation of the skin of a mammal due to said cosmetic.

152. (New) The composition of claim 151, wherein the reagent suppresses the protease activity in an irreversible manner.

153. (New) The composition of claim 151, wherein the reagent suppresses the protease activity in a reversible manner.

154. (New) The composition of claim 151, wherein the reagent is a compound of formula 1:



FORMULA 1

wherein:

n is 1 or 2;

R¹ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_mCO₂R⁴ wherein m=1-4, and R⁴ is as defined below;

R² is a hydrogen atom, chloro, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_pCO₂R⁵, wherein p=0-4, and R⁵ is as defined below;

R³ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁴ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁵ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

A is a natural and unnatural amino acid;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl, halomethyl, CH₂ZR⁶, CH₂OCO(aryl), CH₂OCO(heteroaryl); or CH₂OPO(R⁷)R⁸; where Z is an oxygen or a sulfur atom;

R⁶ is phenyl, substituted phenyl, phenylalkyl, substituted phenylalkyl, heteroaryl, or (heteroaryl)alkyl; and

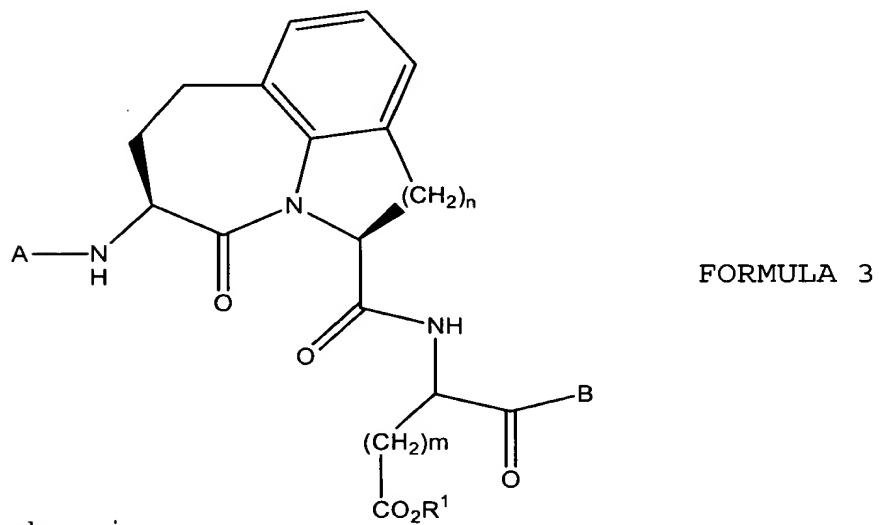
R⁷ and R⁸ are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl,

phenylalkyl, (substituted phenyl) alkyl, and (cycloalkyl) alkyl; and

X and Y are independently selected from the group consisting of a hydrogen atom, halo, trihalomethyl, amino, protected amino, an amino salt, mono-substituted amino, di-substituted amino, carboxy, protected carboxy, a carboxylate salt, hydroxy, protected hydroxy, a salt of a hydroxy group, lower alkoxy, lower alkylthio, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, (cycloalkyl)alkyl, substituted (cycloalkyl)alkyl, phenyl, substituted phenyl, phenylalkyl, and (substituted phenyl)alkyl;

or a pharmaceutically acceptable salt thereof.

155. (New) The composition of claim 151, wherein the reagent is a compound of formula 3:



wherein:

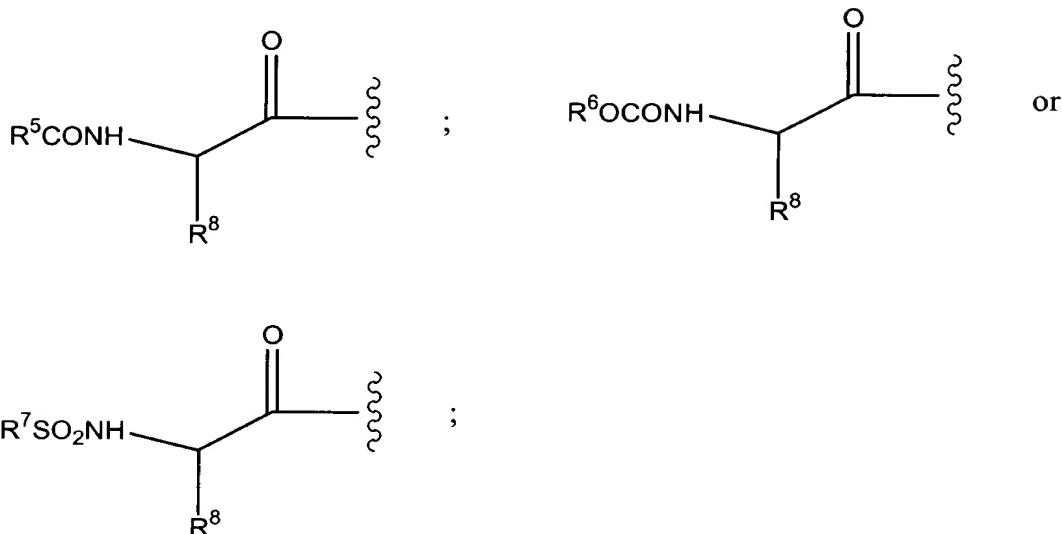
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n is 1 or 2;

m is 1 or 2;

A is R^2CO^- , R^3-O-CO^- , or $R^4SO_2^-$;

a group of the formula:



further wherein:

R^1 is a hydrogen atom, alkyl or phenylalkyl;

R^2 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R^3 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R^4 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁵ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁶ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R⁷ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁸ is an amino acid side chain chosen from the group consisting of natural and unnatural amino acids;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, (heteroaryl)alkyl, or halomethyl;

a group of the formula:

-CH₂XR⁹;

wherein R⁹ is phenyl, substituted phenyl, phenylalkyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl; and X is an oxygen or a sulfur atom;

a group of the formula:

-CH₂-O-CO-(ARYL);

a group of the formula:

-CH₂-O-CO-(HETEROARYL);

a group of the formula:

-CH₂-O-PO(R¹⁰)R¹¹;

wherein R¹⁰ and R¹¹ are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl and (substituted phenyl) alkyl; and the pharmaceutically-acceptable salts thereof.

156. (New) A method for preventing or ameliorating inflammation due to contact of the skin of a mammal with an irritant comprising contacting the skin with a reagent that suppresses the protease activity of at least one member of the interleukin-1beta-converting enzyme (ICE)/CED-3 family.

157. (New) The method of claim 156, wherein the irritant is a chemical irritant.

158. (New) The method of claim 157, wherein the chemical irritant is a cosmetic.

159. (New) The method of claim 157, wherein the chemical irritant is from a plant.

160. (New) The method of claim 159, wherein the plant is selected from the group consisting of Poison Ivy, Poison Oak, and Poison Sumac.

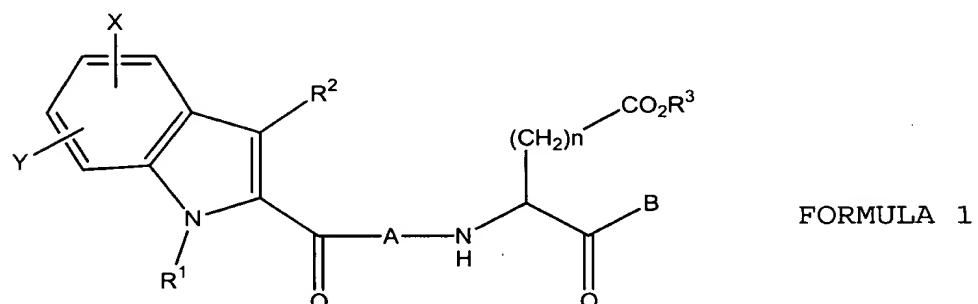
161. (New) The method of claim 156, wherein the irritant is radiation.

162. (New) The method of claim 161, wherein the radiation is ultraviolet radiation.

163. (New) The method of claim 156, wherein the reagent suppresses the protease activity in an irreversible manner.

164. (New) The method of claim 156, wherein the reagent suppresses the protease activity in a reversible manner.

165. (New) The method of claim 156, wherein the reagent is a compound of formula 1:



wherein:

n is 1 or 2;

R¹ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl,

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Suppl. Amdt. Dated March 11, 2004

heteroaryl, (heteroaryl)alkyl or $(CH_2)_mCO_2R^4$, wherein $m=1-4$, and R^4 is as defined below;

R^2 is a hydrogen atom, chloro, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or $(CH_2)_pCO_2R^5$, wherein $p=0-4$, and R^5 is as defined below;

R^3 is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R^4 is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R^5 is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

A is a natural and unnatural amino acid;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl, halomethyl, CH_2ZR^6 , $CH_2OCO(aryl)$, $CH_2OCO(heteroaryl)$; or $CH_2OPO(R^7)R^8$; where Z is an oxygen or a sulfur atom;

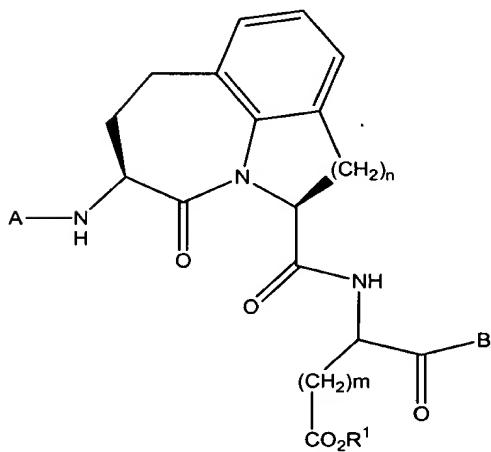
R^6 is phenyl, substituted phenyl, phenylalkyl, substituted phenylalkyl, heteroaryl, or (heteroaryl)alkyl; and

R^7 and R^8 are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl, (substituted phenyl) alkyl, and (cycloalkyl) alkyl; and

X and Y are independently selected from the group consisting of a hydrogen atom, halo, trihalomethyl, amino, protected amino, an amino salt, mono-substituted amino, di-substituted amino, carboxy, protected carboxy, a carboxylate salt, hydroxy, protected hydroxy, a salt of a hydroxy group, lower alkoxy, lower alkylthio, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, (cycloalkyl)alkyl, substituted (cycloalkyl)alkyl, phenyl, substituted phenyl, phenylalkyl, and (substituted phenyl)alkyl;

or a pharmaceutically acceptable salt thereof.

166. (New) The method of claim 156, wherein the reagent is a compound of formula 3:



FORMULA 3

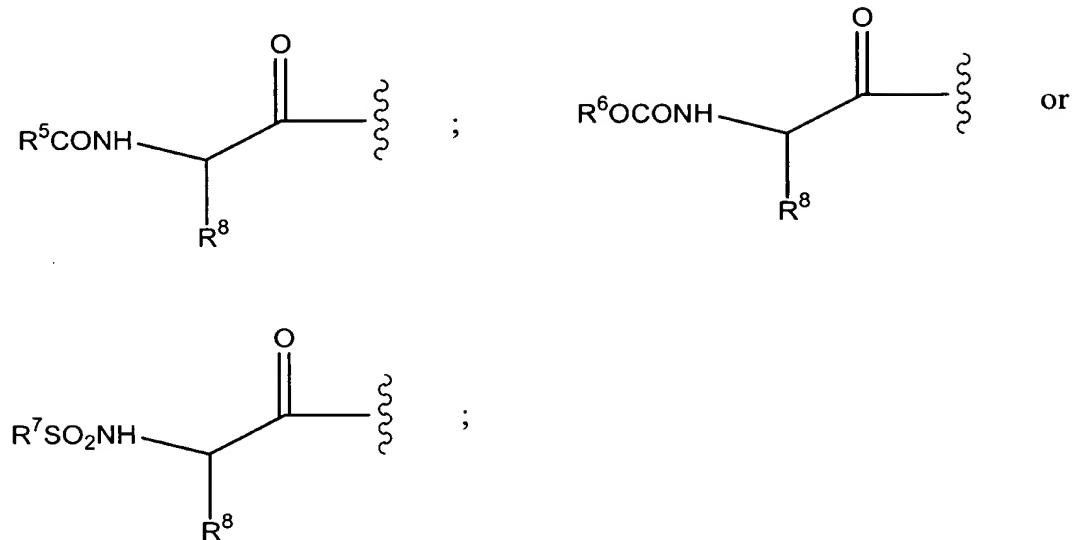
wherein:

n is 1 or 2;

m is 1 or 2;

A is $\text{R}^2\text{CO}-$, $\text{R}^3-\text{O}-\text{CO}-$, or R^4SO_2- ;

a group of the formula:



further wherein:

R^1 is a hydrogen atom, alkyl or phenylalkyl;

R^2 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R^3 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R^4 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R^5 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R^6 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R⁷ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁸ is an amino acid side chain chosen from the group consisting of natural and unnatural amino acids;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, (heteroaryl)alkyl, or halomethyl;
a group of the formula:

-CH₂XR⁹;

wherein R⁹ is phenyl, substituted phenyl, phenylalkyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;
and X is an oxygen or a sulfur atom;

a group of the formula:

-CH₂-O-CO-(ARYL);

a group of the formula:

-CH₂-O-CO-(HETEROARYL);

a group of the formula:

-CH₂-O-PO(R¹⁰)R¹¹;

wherein R¹⁰ and R¹¹ are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl and (substituted phenyl) alkyl; and the pharmaceutically-acceptable salts thereof.

167. (New) A composition comprising a reagent that suppresses the protease activity of at least one member of the interleukin-1beta-converting enzyme (ICE)/CED-3 family formulated for topical administration for use in preventing or ameliorating inflammation due to skin irritation.

168. (New) The composition of claim 167, wherein said formulation is selected from a lotion, a cream, a gel, a liquid, a solid, or a semisolid.

169. (New) The composition of claim 167, wherein the skin irritation is due to contact of the skin with a chemical irritant.

170. (New) The composition of claim 169, wherein the chemical irritant is a cosmetic or an agent derived from a plant.

171. (New) The composition of claim 167, wherein the irritant is radiation.

172. (New) The composition of claim 167, wherein the irritation is due to an insect sting.

173. (New) The composition of claim 167, wherein the irritation is due to an insect bite.

174. (New) The composition of claim 167, wherein the irritation is due to tissue damage.

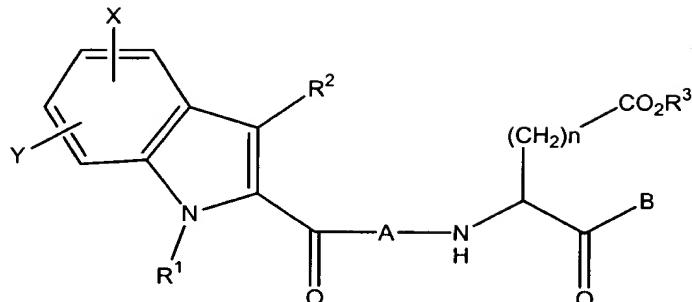
175. (New) The composition of claim 167, wherein the tissue damage is due to physical trauma or disease.

176. (New) The composition of claim 174, wherein the tissue (physical trauma or disease) damage is selected from the group consisting of a bum, a scrape, a cut, frostbite, and chemical injury.

177. (New) The composition of claim 167, wherein the reagent suppresses the protease activity in an irreversible manner.

178. (New) The composition of claim 167, wherein the reagent suppresses the protease activity in a reversible manner.

179. (New) The composition of claim 167, wherein the reagent is a compound of formula 1:



FORMULA 1

wherein:

n is 1 or 2;

R¹ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_mCO₂R⁴ wherein m=1-4, and R⁴ is as defined below;

R² is a hydrogen atom, chloro, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_pCO₂R⁵, wherein p=0-4, and R⁵ is as defined below;

R³ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁴ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁵ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

A is a natural and unnatural amino acid;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl,

(heteroaryl)alkyl, halomethyl, CH_2ZR^6 , $\text{CH}_2\text{OCO(aryl)}$, $\text{CH}_2\text{OCO(heteroaryl)}$; or $\text{CH}_2\text{OPO(R}^7\text{)R}^8$; where Z is an oxygen or a sulfur atom;

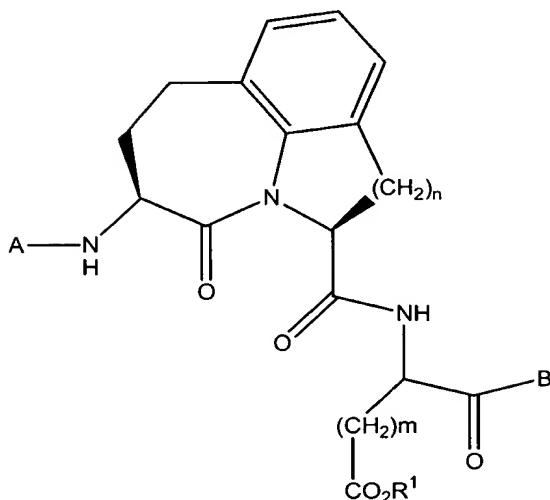
R^6 is phenyl, substituted phenyl, phenylalkyl, substituted phenylalkyl, heteroaryl, or (heteroaryl)alkyl; and

R^7 and R^8 are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl, (substituted phenyl) alkyl, and (cycloalkyl) alkyl; and

X and Y are independently selected from the group consisting of a hydrogen atom, halo, trihalomethyl, amino, protected amino, an amino salt, mono-substituted amino, di-substituted amino, carboxy, protected carboxy, a carboxylate salt, hydroxy, protected hydroxy, a salt of a hydroxy group, lower alkoxy, lower alkylthio, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, (cycloalkyl)alkyl, substituted (cycloalkyl)alkyl, phenyl, substituted phenyl, phenylalkyl, and (substituted phenyl)alkyl;

or a pharmaceutically acceptable salt thereof.

180. (New) The composition of claim 167, wherein the reagent is a compound of formula 3:



FORMULA 3

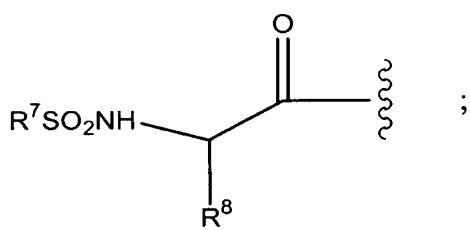
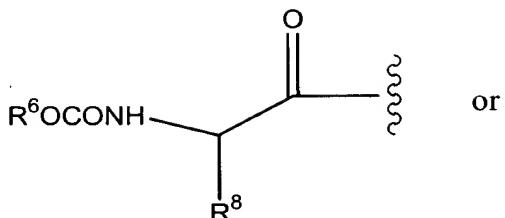
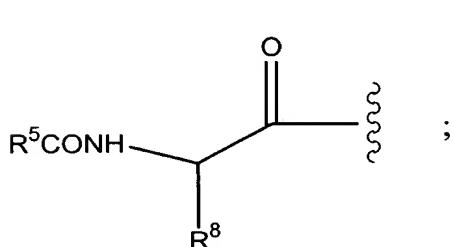
wherein:

n is 1 or 2;

m is 1 or 2;

A is R^2CO^- , R^3-O-CO^- , or $R^4SO_2^-$;

a group of the formula:



further wherein:

R^1 is a hydrogen atom, alkyl or phenylalkyl;

R² is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R³ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R⁴ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁵ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁶ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R⁷ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁸ is an amino acid side chain chosen from the group consisting of natural and unnatural amino acids;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, (heteroaryl)alkyl, or halomethyl;

a group of the formula:

-CH₂XR⁹;

wherein R⁹ is phenyl, substituted phenyl, phenylalkyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl; and X is an oxygen or a sulfur atom; a group of the formula:

-CH₂-O-CO- (ARYL) ;

a group of the formula:

-CH₂-O-CO- (HETEROARYL) ;

a group of the formula:

-CH₂-O-PO (R¹⁰) R¹¹;

wherein R¹⁰ and R¹¹ are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl and (substituted phenyl) alkyl; and the pharmaceutically-acceptable salts thereof.

181. (New) A method for preventing or ameliorating inflammation due to contact of a tissue of a mammal with an irritant comprising contacting said tissue with a reagent that suppresses the protease activity of at least one member of the interleukin-1 beta-converting enzyme (ICE)/CED-3 family.

182. (New) The method of claim 181, wherein the irritant is a chemical irritant.

183. (New) The method of claim 182, wherein the chemical irritant is a cosmetic.

184. (New) The method of claim 182, wherein the chemical irritant is from a plant.

185. (New) The method of claim 184, wherein the plant is selected from the group consisting of Poison Ivy, Poison Oak, and Poison Sumac.

186. (New) The method of claim 181, wherein the irritant is radiation.

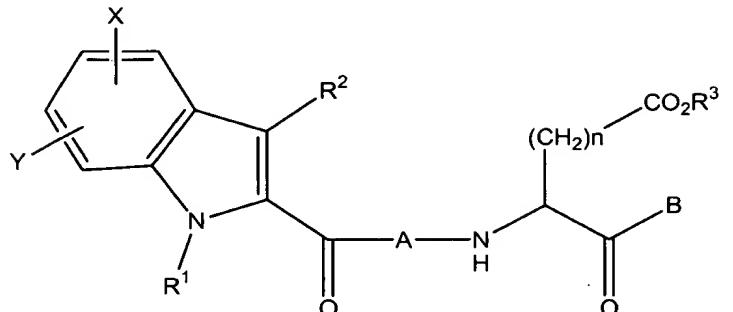
187. (New) The method of claim 186, wherein the radiation is ultraviolet radiation.

188. (New) The method of claim 181, wherein the irritant is a bacteria.

189. (New) The method of claim 181, wherein the reagent suppresses the protease activity in an irreversible manner.

190. (New) The method of claim 181, wherein the reagent suppresses the protease activity in a reversible manner.

191. (New) The method of claim 181, wherein the reagent is a compound of formula 1:



FORMULA 1

wherein:

n is 1 or 2;

R¹ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_mCO₂R⁴, wherein m=1-4, and R⁴ is as defined below;

R² is a hydrogen atom, chloro, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_pCO₂R⁵, wherein p=0-4, and R⁵ is as defined below;

R³ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁴ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁵ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

A is a natural and unnatural amino acid;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl, halomethyl, CH_2ZR^6 , $\text{CH}_2\text{OCO(aryl)}$, $\text{CH}_2\text{OCO(heteroaryl)}$; or $\text{CH}_2\text{OPO(R}^7\text{)R}^8$; where Z is an oxygen or a sulfur atom;

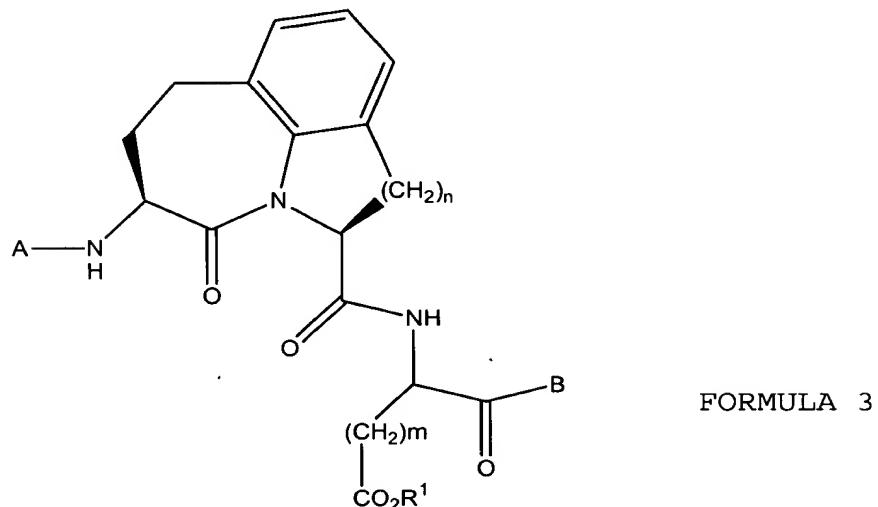
R^6 is phenyl, substituted phenyl, phenylalkyl, substituted phenylalkyl, heteroaryl, or (heteroaryl)alkyl; and

R^7 and R^8 are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl, (substituted phenyl) alkyl, and (cycloalkyl) alkyl; and

X and Y are independently selected from the group consisting of a hydrogen atom, halo, trihalomethyl, amino, protected amino, an amino salt, mono-substituted amino, di-substituted amino, carboxy, protected carboxy, a carboxylate salt, hydroxy, protected hydroxy, a salt of a hydroxy group, lower alkoxy, lower alkylthio, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, (cycloalkyl)alkyl, substituted (cycloalkyl)alkyl, phenyl, substituted phenyl, phenylalkyl, and (substituted phenyl)alkyl;

or a pharmaceutically acceptable salt thereof.

192. (New) The method of claim 181, wherein the reagent is a compound of formula 3:



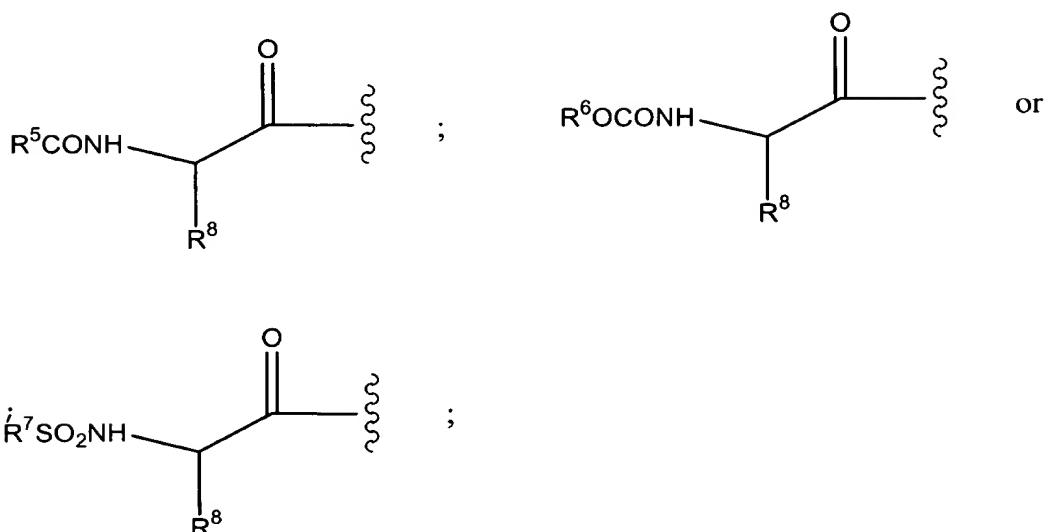
wherein:

n is 1 or 2;

m is 1 or 2;

A is $\text{R}^2\text{CO}-$, $\text{R}^3-\text{O}-\text{CO}-$, or R^4SO_2- ;

a group of the formula:



further wherein:

R¹ is a hydrogen atom, alkyl or phenylalkyl;

R² is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R³ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R⁴ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁵ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁶ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R⁷ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁸ is an amino acid side chain chosen from the group consisting of natural and unnatural amino acids;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, (heteroaryl)alkyl, or halomethyl;
a group of the formula:

-CH₂XR⁹;

wherein R⁹ is phenyl, substituted phenyl, phenylalkyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl; and X is an oxygen or a sulfur atom; a group of the formula:

-CH₂-O-CO-(ARYL);

a group of the formula:

-CH₂-O-CO-(HETEROARYL);

a group of the formula:

-CH₂-O-PO(R¹⁰)R¹¹;

wherein R¹⁰ and R¹¹ are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl and (substituted phenyl) alkyl; and the pharmaceutically-acceptable salts thereof.

193. (New) A method for preventing or ameliorating inflammation associated with tissue damage comprising contacting said tissue with a reagent that suppresses the protease activity of at least one member of the interleukin-1 beta-converting enzyme (ICE)/CED-3 family.

194. (New) The method of claim 193, wherein said tissue damage is due to physical trauma.

195. (New) The method of claim 193, wherein said tissue damage is due to an autoimmune response.

196. (New) The method of claim 193, wherein said tissue damage is due to an infectious disease.

197. (New) The method of claim 193, wherein said tissue damage is due to chronic disease.

198. (New) The method of claim 193, wherein said tissue damage is spinal or brain trauma.

199. (New) The method of claim 193, wherein said tissue damage is due to an acid.

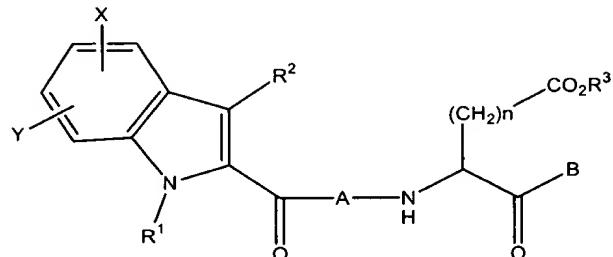
200. (New) The method of claim 193, wherein said tissue damage is due to a base.

201. (New) The method of claim 193, wherein said tissue damage is due to radiation.

202. (New) The method of claim 193, wherein the reagent suppresses the protease activity in an irreversible manner.

203. (New) The method of claim 193, wherein the reagent suppresses the protease activity in a reversible manner.

204. (New) The method of claim 193, wherein the reagent is a compound of formula 1:



FORMULA 1

wherein:

n is 1 or 2;

R¹ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_mCO₂R⁴, wherein m=1-4, and R⁴ is as defined below;

R² is a hydrogen atom, chloro, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_pCO₂R⁵, wherein p=0-4, and R⁵ is as defined below;

R³ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁴ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁵ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

A is a natural and unnatural amino acid;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl,

phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl, halomethyl, CH_2ZR^6 , $\text{CH}_2\text{OCO(aryl)}$, $\text{CH}_2\text{OCO(heteroaryl)}$; or $\text{CH}_2\text{OPO(R}^7\text{)R}^8$; where Z is an oxygen or a sulfur atom;

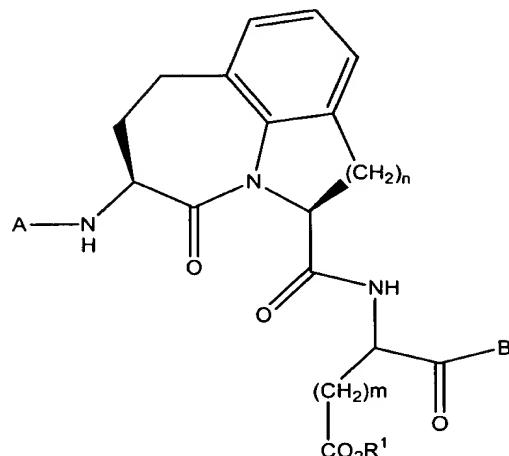
R^6 is phenyl, substituted phenyl, phenylalkyl, substituted phenylalkyl, heteroaryl, or (heteroaryl)alkyl; and

R^7 and R^8 are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl, (substituted phenyl) alkyl, and (cycloalkyl) alkyl; and

X and Y are independently selected from the group consisting of a hydrogen atom, halo, trihalomethyl, amino, protected amino, an amino salt, mono-substituted amino, di-substituted amino, carboxy, protected carboxy, a carboxylate salt, hydroxy, protected hydroxy, a salt of a hydroxy group, lower alkoxy, lower alkylthio, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, (cycloalkyl)alkyl, substituted (cycloalkyl)alkyl, phenyl, substituted phenyl, phenylalkyl, and (substituted phenyl)alkyl;

or a pharmaceutically acceptable salt thereof.

205. (New) The method of claim 193, wherein the reagent is a compound of formula 3:



FORMULA 3

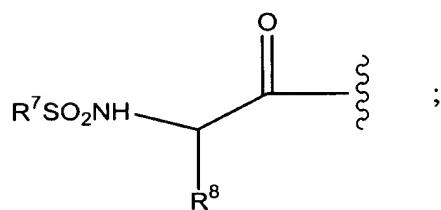
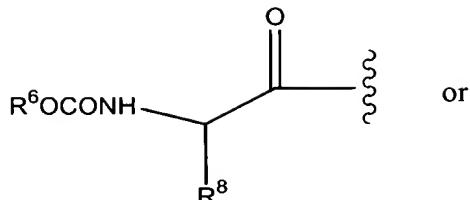
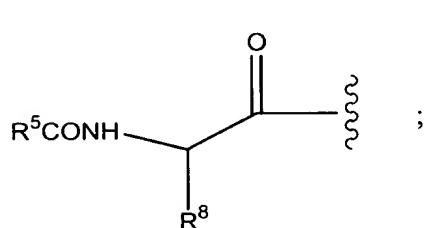
wherein:

n is 1 or 2;

m is 1 or 2;

A is R^2CO^- , R^3-O-CO^- , or $R^4SO_2^-$;

a group of the formula:



further wherein:

R^1 is a hydrogen atom, alkyl or phenylalkyl;

R^2 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R³ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R⁴ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁵ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁶ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R⁷ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁸ is an amino acid side chain chosen from the group consisting of natural and unnatural amino acids;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, (heteroaryl)alkyl, or halomethyl;

a group of the formula:

-CH₂XR⁹;

wherein R⁹ is phenyl, substituted phenyl, phenylalkyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl; and X is an oxygen or a sulfur atom;

a group of the formula:

-CH₂-O-CO- (ARYL) ;

a group of the formula:

-CH₂-O-CO- (HETEROARYL) ;

a group of the formula:

-CH₂-O-PO(R¹⁰)R¹¹;

wherein R¹⁰ and R¹¹ are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl and (substituted phenyl)alkyl; and the pharmaceutically-acceptable salts thereof.

206. (New) A composition comprising a reagent that suppresses the protease activity of at least one member of the interleukin-1beta-converting enzyme (ICE)/CED-3 family and a pharmaceutical, dermatological, or cosmetic carrier formulated for topical application to the skin or mucus membrane of an animal.

207. (New) The composition of claim 206, wherein said composition ameliorates symptoms associated with an inflammatory response.

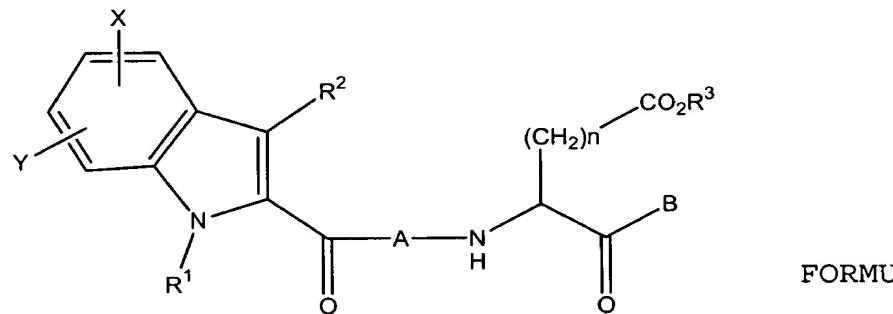
208. (New) The composition of claim 207, wherein said symptoms comprise itching, redness, or swelling.

209. (New) The composition of claim 206, wherein said composition is useful in decreasing loss of collagen or maintaining skin elasticity and appearance.

210. (New) The composition of claim 206, wherein the reagent suppresses the protease activity in an irreversible manner.

211. (New) The composition of claim 206, wherein the reagent suppresses the protease activity in a reversible manner.

212. (New) The composition of claim 206, wherein the reagent is a compound of formula 1:



wherein:

n is 1 or 2;

R¹ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_mCO₂R⁴, wherein m=1-4, and R⁴ is as defined below;

R² is a hydrogen atom, chloro, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_pCO₂R⁵, wherein p=0-4, and R⁵ is as defined below;

R³ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁴ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁵ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

A is a natural and unnatural amino acid;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl, halomethyl, CH₂ZR⁶, CH₂OCO(aryl), CH₂OCO(heteroaryl); or CH₂OPO(R⁷)R⁸; where Z is an oxygen or a sulfur atom;

R⁶ is phenyl, substituted phenyl, phenylalkyl, substituted phenylalkyl, heteroaryl, or (heteroaryl)alkyl; and

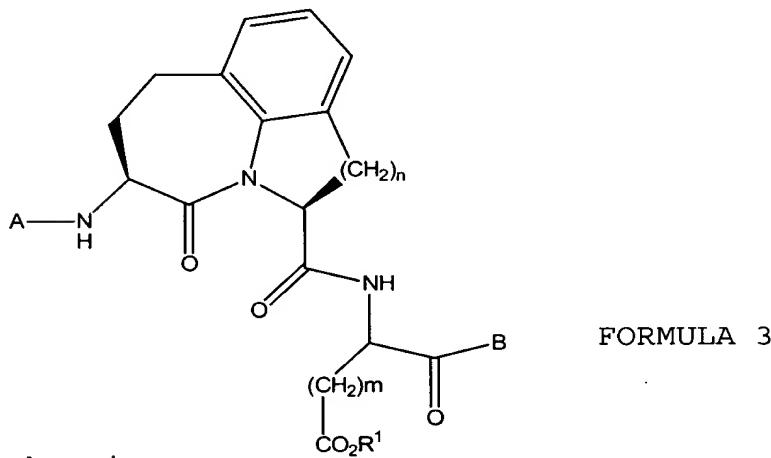
R⁷ and R⁸ are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl, (substituted phenyl) alkyl, and (cycloalkyl) alkyl; and

X and Y are independently selected from the group consisting of a hydrogen atom, halo, trihalomethyl, amino,

protected amino, an amino salt, mono-substituted amino, di-substituted amino, carboxy, protected carboxy, a carboxylate salt, hydroxy, protected hydroxy, a salt of a hydroxy group, lower alkoxy, lower alkylthio, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, (cycloalkyl)alkyl, substituted (cycloalkyl)alkyl, phenyl, substituted phenyl, phenylalkyl, and (substituted phenyl)alkyl;

or a pharmaceutically acceptable salt thereof.

213. (New) The composition of claim 206, wherein the reagent is a compound of formula 3:



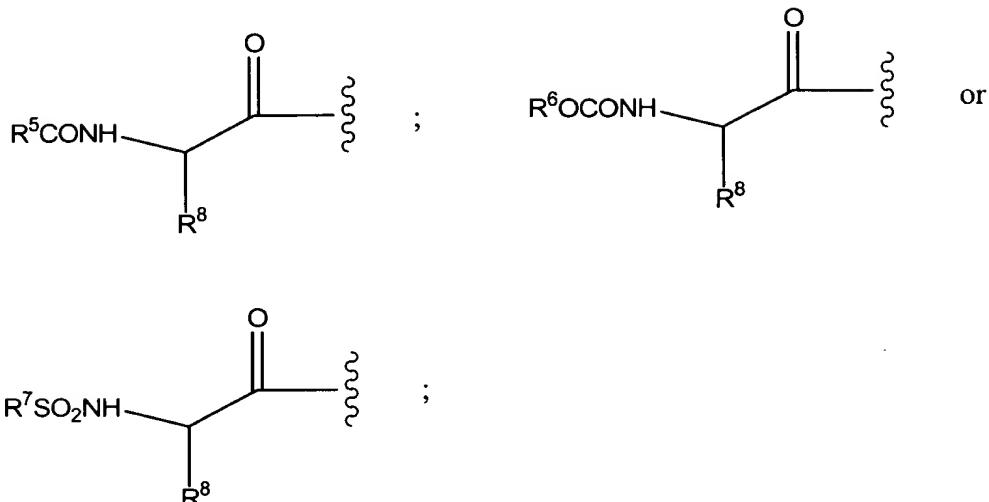
wherein:

n is 1 or 2;

m is 1 or 2;

A is R^2CO^- , R^3-O-CO^- , or $R^4SO_2^-$;

a group of the formula:



further wherein:

R^1 is a hydrogen atom, alkyl or phenylalkyl;

R^2 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R^3 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R^4 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R^5 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R^6 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R⁷ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁸ is an amino acid side chain chosen from the group consisting of natural and unnatural amino acids;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, (heteroaryl)alkyl, or halomethyl;
a group of the formula:

-CH₂XR⁹;

wherein R⁹ is phenyl, substituted phenyl, phenylalkyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;
and X is an oxygen or a sulfur atom;

a group of the formula:

-CH₂-O-CO-(ARYL);

a group of the formula:

-CH₂-O-CO-(HETEROARYL);

a group of the formula:

-CH₂-O-PO(R¹⁰)R¹¹;

wherein R¹⁰ and R¹¹ are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl and (substituted phenyl) alkyl; and the pharmaceutically-acceptable salts thereof.

214. (New) A method for reducing inflammation of a tissue, comprising contacting said tissue with an effective amount of a reagent that suppresses the protease activity of at least one member of the interleukin-1beta-converting enzyme (ICE)/CED-3 family, thereby reducing inflammation of said tissue.

215. (New) The method of claim 214, wherein said tissue is skin.

216. (New) The method of claim 215, wherein said tissue inflammation is due to trauma, sunburn, eczema, contact allergy, dermatitis, psoriasis, erysipelas, acne, ingrown nails, cuts, burns, insect bites, insect stings, or pruritus.

217. (New) The method of claim 214, wherein said tissue is mucosa.

218. (New) The method of claim 214, wherein said tissue inflammation is due to vaginitis, hemorrhoids, conjunctivitis, periodontitis, wisdom tooth eruption, teeth extraction, gingivitis, periodontal abscesses, or prosthesis.

219. (New) A method for ameliorating or treating infectious disease, comprising contacting a cell population

with an inhibiting effective amount of a reagent that suppresses the protease activity of at least one member of the interleukin-1 beta-converting enzyme (ICE)/CED-3 family, thereby ameliorating or treating infectious disease.

220. (New) The method of claim 219, wherein said infectious disease is viral.

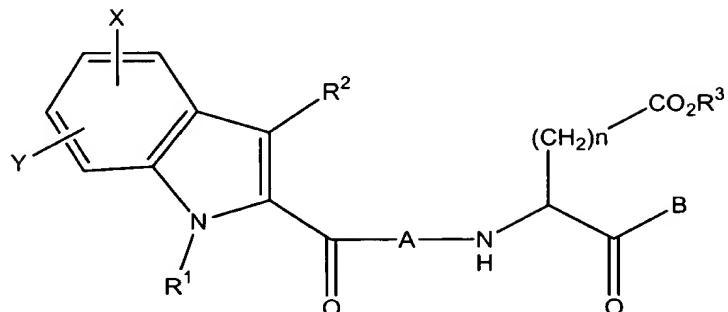
221. (New) The method of claim 219, wherein said contacting is in vitro.

222. (New) The method of claim 219, wherein said contacting is in vivo.

223. (New) The method of claim 219, wherein the reagent suppresses the protease activity in an irreversible manner.

224. (New) The method of claim 219, wherein the reagent suppresses the protease activity in a reversible manner.

225. (New) The method of claim 219, wherein the reagent is a compound of formula 1:



FORMULA 1

wherein:

n is 1 or 2;

R¹ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_mCO₂R⁴, wherein m=1-4, and R⁴ is as defined below;

R² is a hydrogen atom, chloro, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_pCO₂R⁵, wherein p=0-4, and R⁵ is as defined below;

R³ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁴ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁵ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

A is a natural and unnatural amino acid;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl,

(heteroaryl)alkyl, halomethyl, CH_2ZR^6 , $\text{CH}_2\text{OCO(aryl)}$, $\text{CH}_2\text{OCO(heteroaryl)}$; or $\text{CH}_2\text{OPO(R}^7\text{)R}^8$; where Z is an oxygen or a sulfur atom;

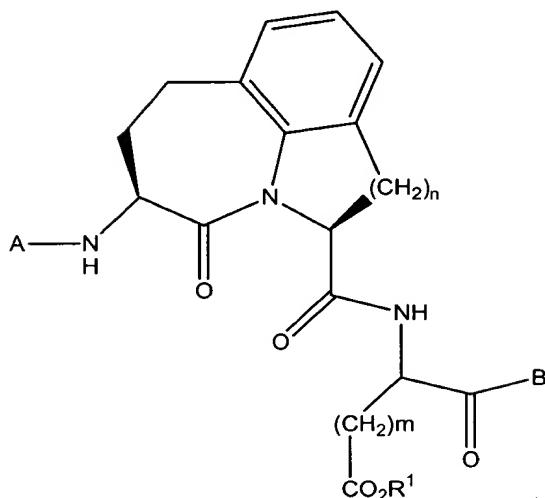
R^6 is phenyl, substituted phenyl, phenylalkyl, substituted phenylalkyl, heteroaryl, or (heteroaryl)alkyl; and

R^7 and R^8 are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl, (substituted phenyl) alkyl, and (cycloalkyl) alkyl; and

X and Y are independently selected from the group consisting of a hydrogen atom, halo, trihalomethyl, amino, protected amino, an amino salt, mono-substituted amino, di-substituted amino, carboxy, protected carboxy, a carboxylate salt, hydroxy, protected hydroxy, a salt of a hydroxy group, lower alkoxy, lower alkylthio, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, (cycloalkyl)alkyl, substituted (cycloalkyl)alkyl, phenyl, substituted phenyl, phenylalkyl, and (substituted phenyl)alkyl;

or a pharmaceutically acceptable salt thereof.

226. (New) The method of claim 219, wherein the reagent is a compound of formula 3:



FORMULA 3

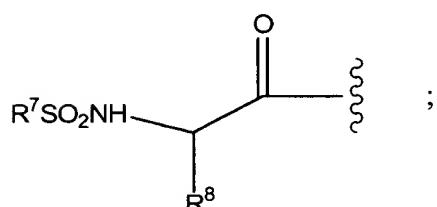
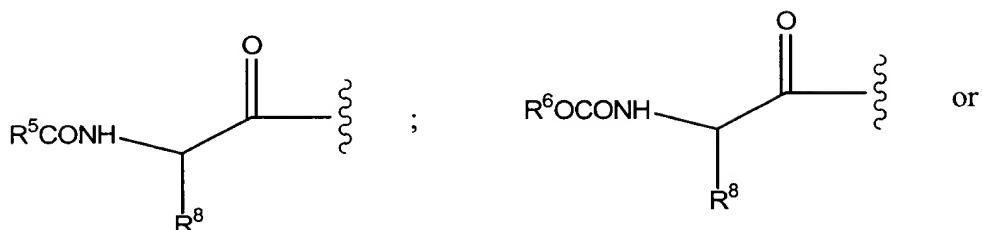
wherein:

n is 1 or 2;

m is 1 or 2;

A is R²CO-, R³-CO-, or R⁴SO₂-;

a group of the formula:



further wherein:

R¹ is a hydrogen atom, alkyl or phenylalkyl;

R² is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R³ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R⁴ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁵ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁶ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R⁷ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁸ is an amino acid side chain chosen from the group consisting of natural and unnatural amino acids;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, (heteroaryl)alkyl, or halomethyl;

a group of the formula:

-CH₂XR⁹;

wherein R⁹ is phenyl, substituted phenyl, phenylalkyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl; and X is an oxygen or a sulfur atom; a group of the formula:

-CH₂-O-CO- (HETEROARYL) ;

a group of the formula:

-CH₂-O-PO (R¹⁰) R¹¹;

wherein R¹⁰ and R¹¹ are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl and (substituted phenyl) alkyl; and the pharmaceutically-acceptable salts thereof.

227. (New) A method for preventing or ameliorating inflammation due to an infectious disease comprising contacting a population of cells exposed to an infectious agent with an inhibiting effective amount of a reagent that suppresses the protease activity of at least one member of the interleukin-1 beta-converting enzyme (ICE)/CED-3 family.

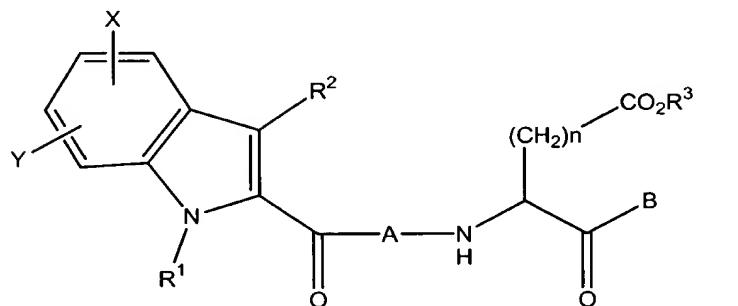
228. (New) The method of claim 227, wherein said contacting is in vitro.

229. (New) The method of claim 227, wherein said contacting is in vivo.

230. (New) The method of claim 227, wherein the reagent suppresses the protease activity in an irreversible manner.

231. (New) The method of claim 227, wherein the reagent suppresses the protease activity in a reversible manner.

232. (New) The method of claim 227, wherein the reagent is a compound of formula 1:



FORMULA 1.

wherein:

n is 1 or 2;

R¹ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_mCO₂R⁴, wherein m=1-4, and R⁴ is as defined below;

R² is a hydrogen atom, chloro, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_pCO₂R⁵, wherein p=0-4, and R⁵ is as defined below;

R³ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁴ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁵ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

A is a natural and unnatural amino acid;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl, halomethyl, CH₂ZR⁶, CH₂OCO(aryl), CH₂OCO(heteroaryl); or CH₂OPO(R⁷)R⁸; where Z is an oxygen or a sulfur atom;

R⁶ is phenyl, substituted phenyl, phenylalkyl, substituted phenylalkyl, heteroaryl, or (heteroaryl)alkyl; and

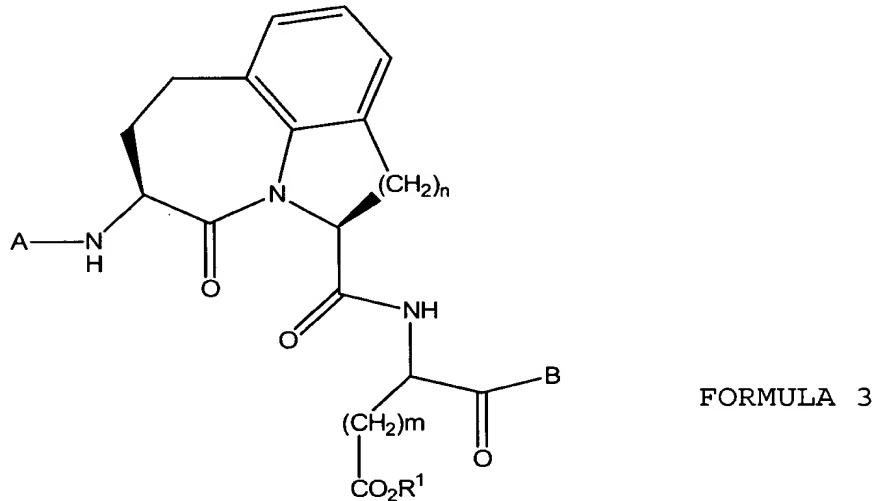
R⁷ and R⁸ are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl, (substituted phenyl) alkyl, and (cycloalkyl) alkyl; and

X and Y are independently selected from the group consisting of a hydrogen atom, halo, trihalomethyl, amino, protected amino, an amino salt, mono-substituted amino, di-substituted amino, carboxy, protected carboxy, a carboxylate salt, hydroxy, protected hydroxy, a salt of a hydroxy group, lower alkoxy, lower alkylthio, alkyl,

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substituted alkyl, cycloalkyl, substituted cycloalkyl, (cycloalkyl)alkyl, substituted (cycloalkyl)alkyl, phenyl, substituted phenyl, phenylalkyl, and (substituted phenyl)alkyl;
or a pharmaceutically acceptable salt thereof.

233. (New) The method of claim 227, wherein the reagent is a compound of formula 3:



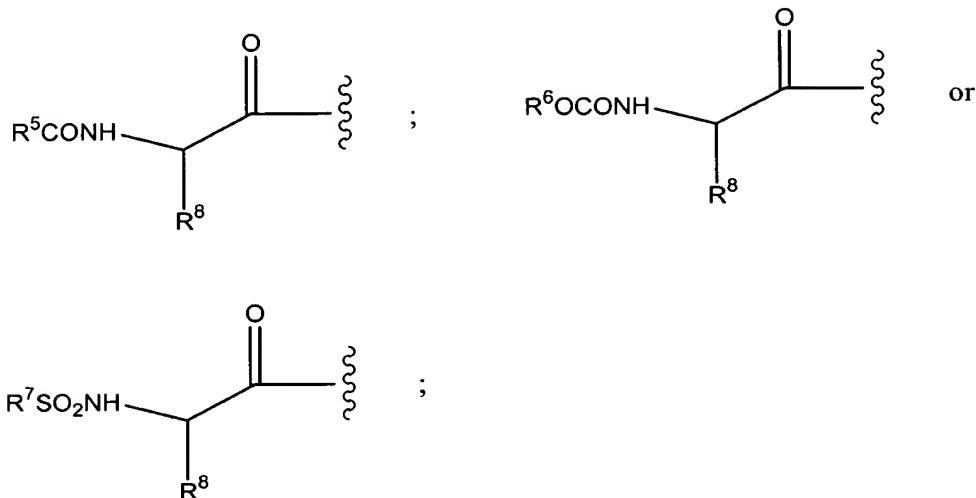
wherein:

n is 1 or 2;

m is 1 or 2;

A is $\text{R}^2\text{CO}-$, $\text{R}^3-\text{O}-\text{CO}-$, or R^4SO_2- ;

a group of the formula:



further wherein:

R^1 is a hydrogen atom, alkyl or phenylalkyl;

R^2 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R^3 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R^4 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R^5 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R^6 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R⁷ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁸ is an amino acid side chain chosen from the group consisting of natural and unnatural amino acids;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, (heteroaryl)alkyl, or halomethyl;
a group of the formula:

-CH₂XR⁹;

wherein R⁹ is phenyl, substituted phenyl, phenylalkyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;
and X is an oxygen or a sulfur atom;

a group of the formula:

-CH₂-O-CO-(ARYL);

a group of the formula:

-CH₂-O-CO-(HETEROARYL);

a group of the formula:

-CH₂-O-PO(R¹⁰)R¹¹;

wherein R¹⁰ and R¹¹ are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl and (substituted phenyl) alkyd; and the pharmaceutically-acceptable salts thereof.

234. (New) A method for preventing or treating inflammation-associated disorders, comprising contacting a cell population with an inhibiting effective amount of a reagent that suppresses the protease activity of at least one member of the interleukin-1beta-converting enzyme (ICE)/CED-3 family, thereby preventing or treating said inflammation-associated disorder.

235. (New) The method of claim 234, wherein said inflammation-associated disorder is due to an inflammatory disease.

236. (New) The method of claim 234, wherein said inflammation-associated disorder is asthma.

237. (New) The method of claim 234, wherein said inflammation-associated disorder is selected from the group consisting of pain, fever, asthma, bronchitis, vascular disease; nephrotic syndrome, and myocardial ischemia.

238. (New) The method of claim 234, wherein said inflammation-associated disorder is bronchitis.

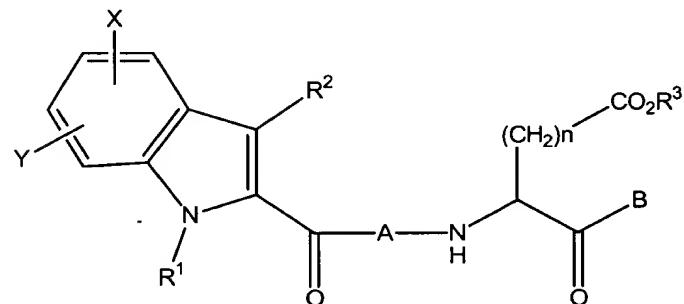
239. (New) The method of claim 234, wherein said inflammation-associated disorder is a vascular disease.

240. (New) The method of claim 237, wherein said pain is headache pain or joint pain.

241. (New) The method of claim 234, wherein the reagent suppresses the protease activity in an irreversible manner.

242. (New) The method of claim 234, wherein the reagent suppresses the protease activity in a reversible manner.

243. (New) The method of claim 234, wherein the reagent is a compound of formula 1:



FORMULA 1

wherein:

n is 1 or 2;

R¹ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_mCO₂R⁴, wherein m=1-4, and R⁴ is as defined below;

R² is a hydrogen atom, chloro, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_pCO₂R⁵, wherein p=0-4, and R⁵ as defined below;

R³ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R⁴ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenyl alkyl;

R⁵ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

A is a natural and unnatural amino acid;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl, halomethyl, CH₂ZR⁶, CH₂OCO(aryl), CH₂OCO(heteroaryl); or CH₂OPO(R⁷)R⁸ where Z is an oxygen or a sulfur atom;

R⁶ is phenyl, substituted phenyl, phenylalkyl, substituted phenylalkyl, heteroaryl, or (heteroaryl)alkyl; and

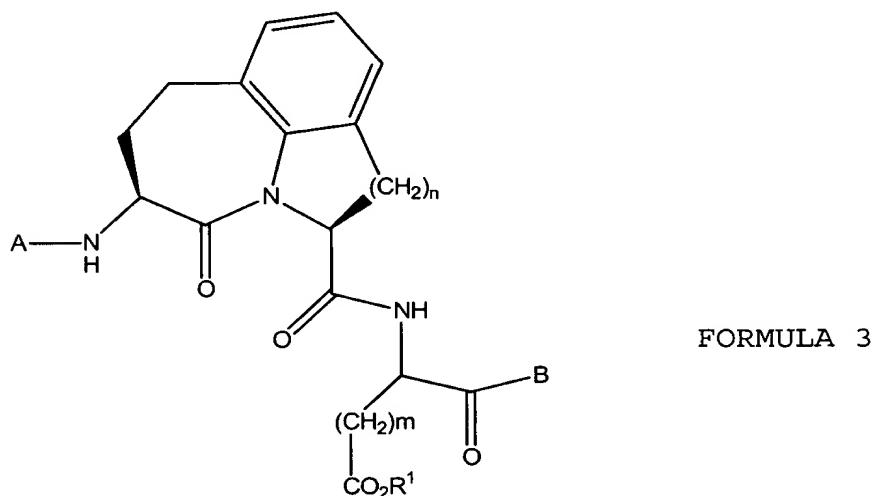
R⁷ and R⁸ are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl, (substituted phenyl)alkyl, and (cycloalkyl)alkyl; and

X and Y are independently selected from the group consisting of a hydrogen atom, halo, trihalomethyl, amino,

protected amino, an amino salt, mono-substituted amino, di-substituted amino, carboxy, protected carboxy, a carboxylate salt, hydroxy, protected hydroxy, a salt of a hydroxy group, lower alkoxy, lower alkylthio, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, (cycloalkyl)alkyl, substituted (cycloalkyl)alkyl, phenyl, substituted phenyl, phenylalkyl, and (substituted phenyl)alkyl;

or a pharmaceutically acceptable salt thereof.

244. (New) The method of claim 234 wherein the reagent is a compound of formula 3:



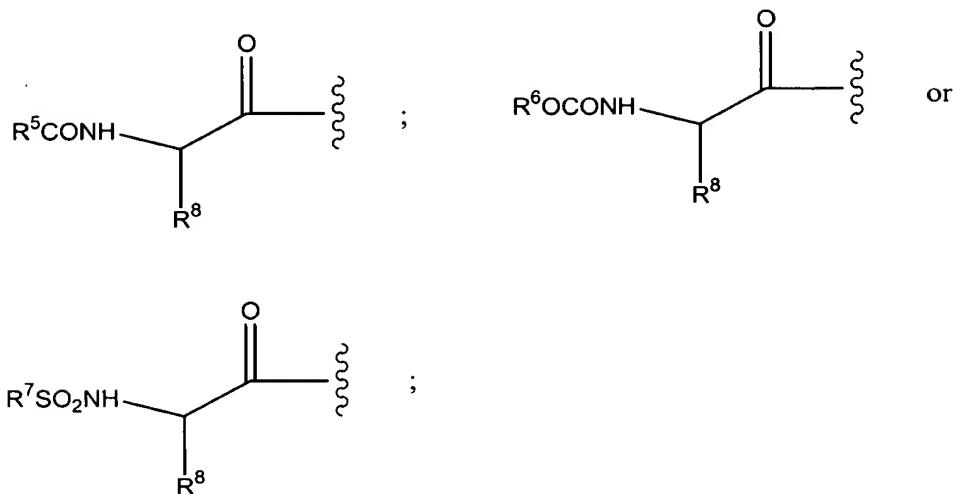
wherein:

n is 1 or 2;

m is 1 or 2;

A is R²CO-, R³-O-CO-, or R⁴SO₂-;

a group of the formula:



further wherein:

R^1 is a hydrogen atom, alkyl or phenylalkyl;

R^2 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R^3 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R^4 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R^5 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R^6 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R⁷ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁸ is an amino acid side chain chosen from the group consisting of natural and unnatural amino acids;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, (heteroaryl)alkyl, or halomethyl;

a group of the formula:

-CH₂XR⁹;

wherein R⁹ is phenyl, substituted phenyl, phenylalkyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl; and X is an oxygen or a sulfur atom;

a group of the formula:

-CH₂-O-CO-(ARYL) ;

a group of the formula:

-CH₂-O-CO-(HETEROARYL) ;

a group of the formula:

-CH₂-O-PO(R¹⁰)R¹¹;

wherein R¹⁰ and R¹¹ are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl and (substituted phenyl) alkyl; and the pharmaceutically-acceptable salts thereof.

245. (New) The method of claim 234, wherein the cell population is also contacted with a second active agent.

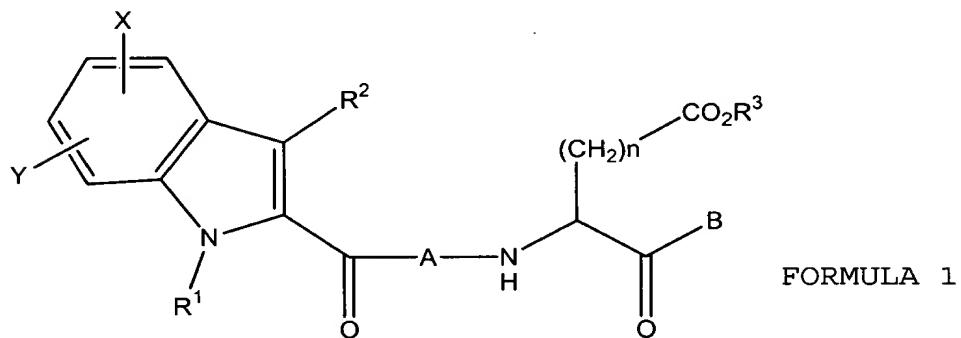
246. (New) The method of claim 245, wherein the active agent is selected from the group consisting of: anti-inflammatory agents, matrix metalloprotease inhibitors, lipoxygenase inhibitors, antagonists of cytokines other than interleukin-1beta, agents that modify differentiation, agents that modify proliferation, agents that modify pigmentation, antibacterial agents, antiparasitic agents, antifungal agents, anaesthetics, antipruriginous agents, antiviral agents, keratolytic agents, anti-free-radical agents, anti-seborrhoeic agents, anti-dandruff agents, and anti-acne agents.

247. (New) A composition comprising a reagent that suppresses the protease activity of at least one member of the interleukin-1beta-converting enzyme (ICE)/CED-3 family and an orally, nasally or intravenously acceptable carrier, adapted for preventing or treating inflammation-associated disorders.

248. (New) The composition of claim 247, wherein the reagent suppresses the protease activity in an irreversible manner.

249. (New) The composition of claim 247, wherein the reagent suppresses the protease activity in a reversible manner.

250. (New) The composition of claim 247, wherein the reagent is a compound of formula 1:



wherein:

n is 1 or 2;

R¹ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_mCO₂R⁴, wherein m=1-4, and R⁴ is as defined below;

R² is a hydrogen atom, chloro, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl or (CH₂)_pCO₂R⁵, wherein p=0-4, and R⁵ is as defined below;

R³ is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R^4 is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

R^5 is a hydrogen atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted)phenylalkyl;

A is a natural and unnatural amino acid;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, (substituted)phenyl, phenylalkyl, (substituted)phenylalkyl, heteroaryl, (heteroaryl)alkyl, halomethyl, CH_2ZR^6 , $CH_2OCO(aryl)$, $CH_2OCO(heteroaryl)$; or $CH_2OPO(R^7)R^8$; where Z is an oxygen or a sulfur atom;

R^6 is phenyl, substituted phenyl, phenylalkyl, substituted phenylalkyl, heteroaryl, or (heteroaryl)alkyl; and

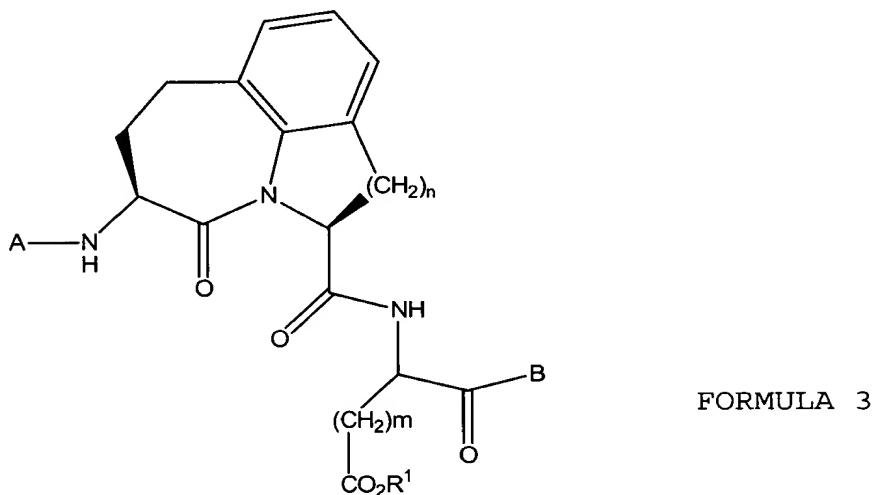
R^7 and R^8 are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl, (substituted phenyl) alkyl, and (cycloalkyl) alkyl; and

X and Y are independently selected from the group consisting of a hydrogen atom, halo, trihalomethyl, amino, protected amino, an amino salt, mono-substituted amino, di-substituted amino, carboxy, protected carboxy, a carboxylate salt, hydroxy, protected hydroxy, a salt of a hydroxy group, lower alkoxy, lower alkylthio, alkyl, substituted alkyl, cycloalkyl, substituted cycloalkyl, (cycloalkyl)alkyl, substituted (cycloalkyl)alkyl, phenyl,

substituted phenyl, phenylalkyl, and (substituted phenyl)alkyl;

or a pharmaceutically acceptable salt thereof.

251. (New) The composition of claim 247, wherein the reagent is a compound of formula 3:



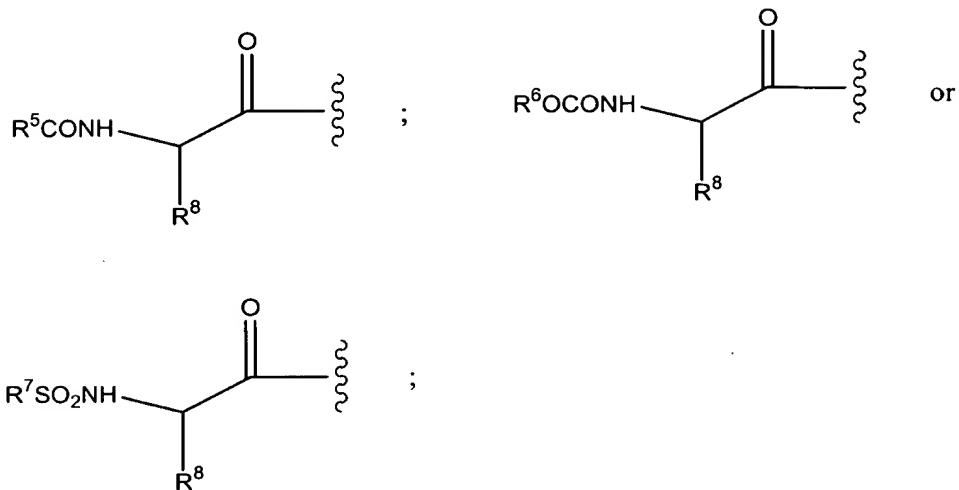
wherein:

n is 1 or 2;

m is 1 or 2;

A is $\text{R}^2\text{CO}-$, $\text{R}^3-\text{O}-\text{CO}-$, or R^4SO_2- ;

a group of the formula:



further wherein:

R^1 is a hydrogen atom, alkyl or phenylalkyl;

R^2 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R^3 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R^4 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R^5 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

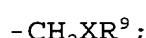
R^6 is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenylalkyl, or (substituted phenyl)alkyl;

R⁷ is alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl;

R⁸ is an amino acid side chain chosen from the group consisting of natural and unnatural amino acids;

B is a hydrogen atom, a deuterium atom, alkyl, cycloalkyl, (cycloalkyl)alkyl, phenyl, phenylalkyl, substituted phenyl, (substituted phenyl)alkyl, heteroaryl, (heteroaryl)alkyl, or halomethyl;

a group of the formula:

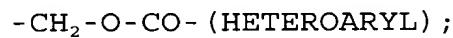


wherein R⁹ is phenyl, substituted phenyl, phenylalkyl, (substituted phenyl)alkyl, heteroaryl, or (heteroaryl)alkyl; and X is an oxygen or a sulfur atom;

a group of the formula:



a group of the formula:



a group of the formula:



wherein R¹⁰ and R¹¹ are independently selected from a group consisting of alkyl, cycloalkyl, phenyl, substituted phenyl, phenylalkyl and (substituted phenyl) alkyl; and the pharmaceutically-acceptable salts thereof.